Recombinant Human Slit2-N

20150227BB

FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	**100-357S**
Size:	5 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	*9353*
Synonyms:	SLIT2; SLIL3; Slit-2

Slit2 is a member of the Slit family that signals through the Roundabout (Robo) receptor as a repellent for axon guidance and neuronal migration, and can also act as a chemo attractant to vascular endothelial cells and a chemotaxis inhibitor for leukocytes. Slit2 is expressed primarily in the fetal lung, kidney, and adult spinal cord, and to a lesser extent in adult adrenal gland, thyroid and trachea. Slit2 is initially synthesized as a 1499 amino acid precursor, which is subsequently cleaved into N-terminal and C-terminal fragments, designated as Slit2-N and Slit2-C respectively. The neurodevelopment related activities, as measured by the ability to repel olfactory bulb axons and to induce branching in dorsal root ganglia axons, are contained only in the N-terminal fragment. Recombinant human Slit2-N is a 1088 amino acid glycoprotein corresponding to the N-terminal portion of the full length Slit2 precursor. Due to glycosylation Slit2-N migrates at an apparent molecular weight of approximately 110.0-116.0 kDa by SDS-PAGE analysis under reducing conditions.

Sequence

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QACPAQCSCS GSTVDCHGLA LRSVPRNIPR NTERLDLNGN
NITRITKTDF AGLRHLRVLQ LMENKISTIE RGAFQDLKEL
ERLRLNRNHL QLFPELLFLG TAKLYRLDLS ENQIQAIPRK
AFRGAVDIKN LQLDYNQISC IEDGAFRALR DLEVLTLNNN
NITRLSVASF NHMPKLRTFR LHSNNLYCDC HLAWLSDWLR
QRPRVGLYTQ CMGPSHLRGH NVAEVQKREF VCSGHQSFMA
PSCSVLHCPA ACTCSNNIVD CRGKGLTEIP TNLPETITEI
RLEQNTIKVI PPGAFSPYKK LRRIDLSNNQ ISELAPDAFQ
GLRSLNSLVL YGNKITELPK SLFEGLFSLQ LLLLNANKIN
CLRVDAFQDL HNLNLLSLYD NKLQTIAKGT FSPLRAIQTM
HLAQNPFICD CHLKWLADYL HTNPIETSGA RCTSPRRLAN
KRIGQIKSKK FRCSAKEQYF IPGTEDYRSK LSGDCFADLA
CPEKCRCEGT TVDCSNQKLN KIPEHIPQYT AELRLNNNEF
TVLEATGIFK KLPQLRKINF SNNKITDIEE GAFEGASGVN
EILLTSNRLE NVQHKMFKGL ESLKTLMLRS NRITCVGNDS
FIGLSSVRLL SLYDNQITTV APGAFDTLHS LSTLNLLANP
FNCNCYLAWL GEWLRKKRIV TGNPRCQKPY FLKEIPIQDV
AIQDFTCDDG NDDNSCSPLS RCPTECTCLD TVVRCSNKGL
KVLPKGIPRD VTELYLDGNQ FTLVPKELSN YKHLTLIDLS
NNRISTLSNQ SFSNMTQLLT LILSYNRLRC IPPRTFDGLK
SLRLLSLHGN DISVVPEGAF NDLSALSHLA IGANPLYCDC
NMQWLSDWVK SEYKEPGIAR CAGPGEMADK LLLTTPSKKF
TCQGPVDVNI LAKCNPCLSN PCKNDGTCNS DPVDFYRCTC
PYGFKGQDCD VPIHACISNP CKHGGTCHLK EGEEDGFWCI
CADGFEGENC EVNVDDCEDN DCENNSTCVD GINNYTCLCP
PEYTGELCEE KLDFCAQDLN PCQHDSKCIL TPKGFKCDCT
PGYVGEHCDI DFDDCQDNKC KNGAHCTDAV NGYTCICPEG
YSGLFCEFSP PMV
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Database References

Protein RefSeq:	NP_004778.1
Uniprot ID:	O94813
mRNA RefSeq:	NM_004787.1

Product Specifications

Expressed in	HEK 293 cells
Purity	> 98% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	1093
MW:	120-140 kDa

Biological Activity: Determined by its ability to inhibit MC3T3/E1 osteoblasts cell differentiation.

AVOID REPEATED FREEZE AND THAW CYCLES!